

REMARKS

The Office Action mailed November 2, 2004, has been received and reviewed. Applicants acknowledge election of Group I, claims 1-6, as per the telephone conversation on 10/13/04. Claims 1-6 stand rejected under 35 U.S.C. § 112, second paragraph, as assertedly being vague. Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by Yoshimura *et al.* (U.S. Patent 5,512,328). Claims 1-3 and 6 stand rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by Uno *et al.* (U.S. Patent 4,803,154). Reconsideration is respectfully requested.

Support for Claim Amendments:

Basis for the amendments can be found throughout the specification and claims, for example, in claim 6 and in paragraph 12 and 13 of the present specification.

Priority

The applicants thank the Examiner for recognition of the priority claim in the present application. A certified copy of EP 01200551.8 will be submitted upon receipt of the appropriate document.

Specification:

While the applicants respectfully disagree that the term "thereof" is a legal phraseology, since it simply references the analogues back to the biomolecules, to expedite prosecution of the application, the abstract has been amended to remove the term. Reconsideration and withdrawal of the objection are respectfully requested.

Likewise, the Brief Description of the Drawings has been amended as suggested by the Examiner. Reconsideration and withdrawal of the objection are respectfully requested.

Rejections under 35 U.S.C. § 112, second paragraph:

Claims 1-6 stand rejected under 35 U.S.C. § 112, second paragraph, as assertedly being

vague. Specifically, the phrase "for determining binding of a first member molecule within a library of spots of tentative first member binding molecules with a second member binding molecule" is asserted to be vague. Claim 1 has been amended, thereby removing the rejected phrase. In light of the amendment the rejection is moot. Reconsideration and withdrawal of the rejection are respectfully requested.

In addition, the term "materially" as used in claim 1 is asserted to be vague and indefinite, since the specification does not provide a definition of the term. The term materially, as used in the claims carries its ordinary and customary meaning, for example, as may be found in a dictionary. The Office asserts that it is not clear whether the surface areas contain different materials from the surface patches, or contains the same materials with different properties from the surface patches, or whether the surface areas are distinct from the surface patches in another manner (page 10 of the Office Action). Applicants submit that a person of ordinary skill in the art knows that the properties of the surface areas and surface patches can be varied in any of the ways questioned by the Office. Reconsideration and withdrawal of the rejection are respectfully requested.

Finally, the term "library" in claim 5 is asserted to be vague and indefinite. The term "library" is used in accordance with the customary meaning understood in the art, *i.e.*, a plurality of differing molecules (each of the differing molecules of the library may be present in multiple copies), for example, as shown in figure 6. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection under 35 U.S.C. § 102:

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by Yoshimura *et al.* Applicants respectfully traverse the rejection, since Yoshimura *et al.* does not disclose a micro-array support with surface areas and surface patches, wherein the density of the surface patches is at least 25 patches per square centimeter. Since Yosimura does not disclose all of the claim elements, the claims are not anticipated by the reference. Reconsideration and withdrawal of the rejection are respectfully requested.

Serial No. 10/642,553
Amdt. dated March 2, 2005
Reply to the Office Action of November 2, 2004

Claims 1-3 and 6 stand rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by Uno *et al.* Applicants respectfully traverse the rejection. Uno *et al.* not teach a spot density of at least 25 spots per square centimeter. For example, Uno *et al.* shows in Example 1 a sheet of plastic membrane having a size of 150 x 150 mm (225 square centimeters), which is used for the preparation of a spot membrane with 36 spots, with a diameter of 6 mm per spot. Hence, the spot density is 36 spots per 225 square centimeters, or 0.16 spots per square centimeter.

The Examiner also cites to column 4, lines 41-44 of Uno *et al.* as disclosing a spot density of at least 25 spots per square centimeter. The cited passage actually results in a spot density of 2.67 spots per square centimeter. The preceding lines, col. 4, lines 37-39, disclose that the membrane is 2 to 12 by 6 to 20 centimeters. Hence the smallest membrane is 2 x 6 cm, or 12 cm². Uno *et al.*, at col. 4, lines 40-44, discloses that the spot membrane comprises 4 to 32 spots per membrane (the diameter of the spots being 0.5 to 15 mm in diameter). Therefore, taking the smallest membrane of 12 cm and applying the largest number of spots, 32 spots, the highest spot density of the cited passage is 32 spots divided by 12 centimeters, or 2.67 spots per centimeter.

Since Uno *et al.* does not teach or suggest a surface patch density of at least 25 patches per square centimeter, the reference cannot anticipate claims 1-3. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection under 35 U.S.C. § 103:

Claims 4 and 5 stand rejected under 35 U.S.C. § 103 as assertedly being unpatentable over Uno *et al.* in view of Drumheller or Rowe *et al.*, respectively. As discussed herein, Uno *et al.* does not teach or suggest a density of surface patches that is at least about 25 patches per square centimeter, *i.e.*, a spot density of at least 25 spots per centimeter. Furthermore, Drumheller and/or Rowe *et al.* do not disclose at least about 25 patches per square centimeter. Therefore, Uno *et al.*, Drumheller and Rowe *et al.*, either alone or in combination, do not teach or suggest all of the claim elements. Hence, the cited references do not render the claims obvious and reconsideration and withdrawal of the rejection are respectfully requested.

Serial No. 10/642,553
Amdt. dated March 2, 2005
Reply to the Office Action of November 2, 2004

CONCLUSION

Claims 1-5 should be in condition for allowance and early notification of such is respectfully requested. In the event questions remain after consideration of these remarks and amendments, the Office is kindly requested to contact applicant's representative at the number provided below.

Respectfully submitted,



G. Scott Dorland, Ph.D.
Registration No. 51,622
Attorney for Applicants
TRASKBRITT, P.C.
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: March 2, 2005
GSD/gsd